

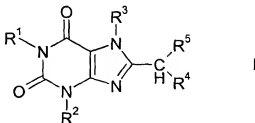
**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-12. (cancelled)

Claim 13. (new) A compound of formula



in free or salt form, where

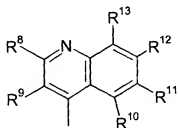
R<sup>1</sup> is hydrogen or alkyl optionally substituted by hydroxy, alkoxy, or alkylthio,

R<sup>2</sup> is hydrogen, alkyl, hydroxyalkyl, alkylcarbonyloxyalkyl, alkoxyalkyl, alkylthioalkyl, alkenyl, cycloalkylalkyl, heterocyclylalkyl, aralkyl in which the aryl ring thereof is optionally fused to a 5-membered heterocyclic group or is optionally substituted by one or more substituents selected from alkoxy, amino, alkylamino, dialkylamino, acylamino, halogen, hydroxy, aminosulfonyl, alkylaminosulfonyl, dialkylaminosulfonyl, alkylsulfonylamino or dialkylaminosulfonylamino, R<sup>3</sup> is hydrogen or alkyl optionally substituted by hydroxy, alkoxy, or alkylthio,

R<sup>4</sup> is hydrogen or alkyl,

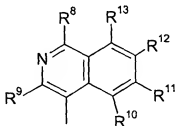
R<sup>5</sup> is a quinolinyl, isoquinolinyl or oxodihydroisoquinolinyl group optionally fused to a 5-membered heterocyclic group and optionally substituted by one or more substituents selected from halogen, cyano, hydroxy, alkyl, hydroxyalkyl, alkoxyalkyl, alkylthioalkyl, alkoxy, alkylthio, alkenyl, alkoxy carbonyl, alkynyl, carboxyl, acyl, a group of formula -N(R<sup>6</sup>)R<sup>7</sup>, aryl optionally substituted by one or more substituents selected from halogen or alkoxy, or heteroaryl having 5 or 6 ring atoms attached through a ring carbon atom to the indicated carbon atom, and R<sup>6</sup> and R<sup>7</sup> are each independently hydrogen or alkyl optionally substituted by hydroxy or alkoxy or one of R<sup>6</sup> and R<sup>7</sup> is hydrogen and the other is acyl, or R<sup>6</sup> and R<sup>7</sup> together with the nitrogen atom to which they are attached denote a 5- or 6- membered heterocyclyl group.

Claim 14. (new) A compound according to claim 1, in which R<sup>5</sup> is a quinolinyl group of formula



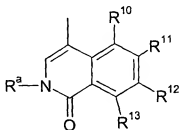
II

or an isoquinolinyl group of formula



III

or an oxodihydroisoquinolinyl group of formula



IIIA

where R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup> and R<sup>13</sup> are each independently hydrogen or a substituent selected from halogen, cyano, hydroxy, alkyl, hydroxyalkyl, alkoxyalkyl, alkylthioalkyl, alkoxy, alkylthio, alkenyl, alkoxycarbonyl, alkynyl, carboxyl, acyl, a group of formula -N(R<sup>6</sup>)R<sup>7</sup>, aryl optionally substituted by one or more substituents selected from halogen or alkoxy, or heteroaryl having 5 or 6 ring atoms, and R<sup>6</sup> and R<sup>7</sup> are as defined in claim 1, or R<sup>11</sup> and R<sup>12</sup> together with the carbon atoms to which they are attached denote a 5- membered heterocyclic group having two oxygen or nitrogen atoms in the ring, and R<sup>a</sup> is hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl.

Claim 15. (new) A compound according to claim 1, in which R<sup>1</sup> is hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl optionally substituted by hydroxy, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-alkylthio, R<sup>2</sup> is hydrogen, C<sub>1</sub>-C<sub>8</sub>-alkyl, hydroxy-C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkylcarbonylonxy-C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>1</sub>-C<sub>8</sub>-alkyl, or C<sub>1</sub>-C<sub>4</sub>-alkylthio-C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>2</sub>-C<sub>4</sub>-alkenyl, C<sub>3</sub>-C<sub>8</sub>-cycloalkyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, heterocyclyl-C<sub>1</sub>-C<sub>4</sub>-alkyl where the heterocyclyl group is a 5- or 6- membered heterocyclyl group

having one or two hetero atoms selected from nitrogen and oxygen atoms in the ring, phenyl-C<sub>1</sub>-C<sub>4</sub>-alkyl in which the phenyl ring is optionally substituted by one or more substituents selected from C<sub>1</sub>-C<sub>4</sub>-alkoxy, amino, C<sub>1</sub>-C<sub>4</sub>-alkylamino, di(C<sub>1</sub>-C<sub>4</sub>-alkyl)amino, C<sub>1</sub>-C<sub>4</sub>-alkylcarbonylamino, halogen, C<sub>1</sub>-C<sub>4</sub>-alkylsulfonylamino, or di(C<sub>1</sub>-C<sub>4</sub>-alkyl)aminosulfonylamino, and is optionally fused to a 5- membered heterocyclic ring having two oxygen or two nitrogen atoms in the ring, R<sup>3</sup> is hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl optionally substituted by hydroxy, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-alkylthio, R<sup>4</sup> is hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl, R<sup>5</sup> is a quinolinyl, isoquinolinyl or oxodihydroisoquinolinyl group optionally fused to a 5- membered heterocyclic group having two oxygen or two nitrogen atoms in the ring and optionally substituted by one or more substituents selected from halogen, cyano, carboxy, hydroxy, C<sub>1</sub>-C<sub>4</sub>-alkyl, hydroxy-C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkylthio-C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, C<sub>1</sub>-C<sub>4</sub>-alkylthio, C<sub>2</sub>-C<sub>4</sub>-alkenyl, C<sub>2</sub>-C<sub>4</sub>-alkynyl, C<sub>1</sub>-C<sub>4</sub>-alkylcarbonyl, a group -N(R<sup>6</sup>)R<sup>7</sup> or phenyl optionally substituted by one or more substituents selected from halogen or C<sub>1</sub>-C<sub>4</sub>-alkoxy and R<sup>6</sup> and R<sup>7</sup> are each independently hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl optionally substituted by hydroxy or alkoxy, or one of R<sup>6</sup> and R<sup>7</sup> is hydrogen and the other is C<sub>1</sub>-C<sub>4</sub>-alkylcarbonyl, or R<sup>6</sup> and R<sup>7</sup> together with the nitrogen atom to which they are attached denote a 5- or 6- membered heterocyclyl group having one or two nitrogen atoms and, optionally, an oxygen atom in the ring.

Claim 16. (new) A compound according to claim 2, in which

R<sup>1</sup> is hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl, R<sup>2</sup> is hydrogen, C<sub>1</sub>-C<sub>8</sub>-alkyl, hydroxy-C<sub>1</sub>-C<sub>8</sub>-alkyl, or C<sub>1</sub>-C<sub>4</sub>-alkylcarbonyloxy-C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>2</sub>-C<sub>4</sub>-alkenyl, C<sub>3</sub>-C<sub>8</sub>-cycloalkyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, heterocyclyl-C<sub>1</sub>-C<sub>4</sub>-alkyl where the heterocyclyl group is a 5- membered heterocyclyl group having one nitrogen or oxygen atom in the ring, phenyl-C<sub>1</sub>-C<sub>4</sub>-alkyl in which the phenyl ring is optionally substituted by one or two substituents selected from C<sub>1</sub>-C<sub>4</sub>-alkoxy, amino, C<sub>1</sub>-C<sub>4</sub>-alkylcarbonylamino, chlorine, bromine, C<sub>1</sub>-C<sub>4</sub>-alkylsulfonylamino, or di(C<sub>1</sub>-C<sub>4</sub>-alkyl)aminosulfonylamino and is optionally fused to a 5- membered heterocyclic ring having two oxygen atoms in the ring,

R<sup>3</sup> is hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl,

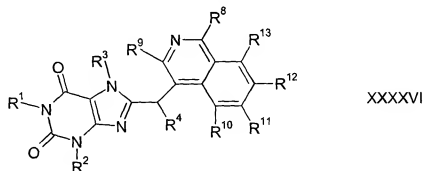
R<sup>4</sup> is hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl,

R<sup>5</sup> is a quinolinyl group of formula II, an isoquinolinyl group of formula III or an oxodihydroisoquinolinyl group of formula IIIA, where R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup> and R<sup>13</sup> are each independently selected from hydrogen, halogen, cyano, carboxy, hydroxy, C<sub>1</sub>-C<sub>4</sub>-alkyl, hydroxy-C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkylthio-C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, C<sub>1</sub>-C<sub>4</sub>-alkylthio, C<sub>2</sub>-C<sub>4</sub>-alkenyl, C<sub>2</sub>-C<sub>4</sub>-alkynyl, C<sub>1</sub>-C<sub>4</sub>-alkylcarbonyl, a group -N(R<sup>6</sup>)R<sup>7</sup> or phenyl optionally substituted by one or two substituents selected from halogen or C<sub>1</sub>-C<sub>4</sub>-alkoxy, or R<sup>11</sup> and R<sup>12</sup> together with the carbon atoms to which they are attached denote a 5-membered heterocyclic group having two oxygen atoms in the ring, and

R<sup>6</sup> and R<sup>7</sup> are each independently hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl optionally substituted by hydroxy or alkoxy or one of R<sup>6</sup> and R<sup>7</sup> is hydrogen and the other is C<sub>1</sub>-C<sub>4</sub>-alkylcarbonyl, or R<sup>6</sup> and R<sup>7</sup> together with the nitrogen atom to which they are attached denote a 6-membered heterocyclyl group having one or two nitrogen atoms, or one nitrogen atom and one oxygen atom, in the ring.

Claim 17. (new) A compound according to claim 4, in which R<sup>5</sup> is an isoquinolinyl group of formula III in which R<sup>8</sup> is hydrogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, halogen, cyano, -N(R<sup>9</sup>)R<sup>7</sup> where R<sup>9</sup> and R<sup>7</sup> are each independently C<sub>1</sub>-C<sub>4</sub>-alkyl or R<sup>8</sup> and R<sup>7</sup> together with the nitrogen atom to which they are attached denote a 6-membered heterocyclyl group having one or two nitrogen atoms, or one nitrogen atom and one oxygen atom, in the ring, or phenyl substituted by one or two C<sub>1</sub>-C<sub>4</sub>-alkoxy groups; R<sup>9</sup> and R<sup>10</sup> are each independently hydrogen, C<sub>1</sub>-C<sub>4</sub>-alkyl or halogen; R<sup>11</sup> and R<sup>12</sup> are each independently hydrogen, halogen, cyano, carboxy, hydroxy, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>2</sub>-C<sub>4</sub>-alkynyl, or R<sup>11</sup> and R<sup>12</sup> together with the carbon atoms to which they are attached denote a 5-membered heterocycle having two oxygen atoms in the ring; and R<sup>13</sup> is hydrogen or halogen.

Claim 18. (new) A compound of formula XXXXVI



in free or salt form, where

R<sup>1</sup> is CH<sub>3</sub>, R<sup>2</sup> is (CH<sub>3</sub>)<sub>2</sub>CHCH<sub>2</sub>, R<sup>3</sup> and R<sup>4</sup> are each H, R<sup>6</sup> is CH<sub>3</sub>, R<sup>9</sup> and R<sup>10</sup> are each H, and R<sup>11</sup> and R<sup>12</sup> are each OCH<sub>3</sub>; or

R<sup>1</sup> is CH<sub>3</sub>, R<sup>2</sup> is (CH<sub>3</sub>)<sub>2</sub>CHCH<sub>2</sub>, R<sup>3</sup>, R<sup>4</sup>, R<sup>6</sup>, R<sup>9</sup> and R<sup>10</sup> are each H, and R<sup>11</sup> and R<sup>12</sup> are each OCH<sub>3</sub>; or

R<sup>1</sup> is CH<sub>3</sub>, R<sup>2</sup> is (CH<sub>3</sub>)<sub>3</sub>CCH<sub>2</sub>, R<sup>3</sup>, R<sup>4</sup>, R<sup>6</sup>, R<sup>9</sup> and R<sup>10</sup> are each H, and R<sup>11</sup> and R<sup>12</sup> are each OCH<sub>3</sub>; or

R<sup>1</sup> is CH<sub>3</sub>, R<sup>2</sup> is (CH<sub>3</sub>)<sub>2</sub>CHCH<sub>2</sub>, R<sup>3</sup>, R<sup>4</sup>, R<sup>9</sup> and R<sup>10</sup> are each H, R<sup>6</sup> is Cl and R<sup>11</sup> and R<sup>12</sup> are each OCH<sub>3</sub>; or

R<sup>1</sup> is CH<sub>3</sub>, R<sup>2</sup> is (CH<sub>3</sub>)<sub>2</sub>CHCH<sub>2</sub>, R<sup>3</sup>, R<sup>4</sup>, R<sup>6</sup>, R<sup>9</sup> and R<sup>10</sup> are each H, R<sup>11</sup> is OCH<sub>3</sub> and R<sup>12</sup> is H; or

R<sup>1</sup> is CH<sub>3</sub>, R<sup>2</sup> is cyclopropylmethyl, R<sup>3</sup>, R<sup>4</sup>, R<sup>6</sup>, R<sup>9</sup>, R<sup>10</sup> and R<sup>12</sup> are each H and R<sup>11</sup> is OCH<sub>3</sub>; or

R<sup>1</sup> is CH<sub>3</sub>, R<sup>2</sup> is (CH<sub>3</sub>)<sub>2</sub>CHCH<sub>2</sub>, R<sup>3</sup>, R<sup>4</sup>, R<sup>6</sup>, R<sup>9</sup>, R<sup>10</sup> and R<sup>12</sup> are each H and R<sup>11</sup> is CH≡C; or

R<sup>1</sup> is CH<sub>3</sub>, R<sup>2</sup> is 4-(N-dimethylaminosulfonylamino)benzyl, R<sup>3</sup>, R<sup>4</sup>, R<sup>8</sup>, R<sup>9</sup> and R<sup>10</sup> are each H and R<sup>11</sup> and R<sup>12</sup> are each OCH<sub>3</sub>; or

R<sup>1</sup> is CH<sub>3</sub>, R<sup>2</sup> is HOCH<sub>2</sub>CH(CH<sub>3</sub>)CH<sub>2</sub>, R<sup>3</sup>, R<sup>4</sup>, R<sup>8</sup>, R<sup>9</sup> and R<sup>10</sup> are each H and R<sup>11</sup> and R<sup>12</sup> are each OCH<sub>3</sub>; or

R<sup>1</sup> is CH<sub>3</sub>, R<sup>2</sup> is 1-methylcyclopropylmethyl, R<sup>3</sup>, R<sup>4</sup>, R<sup>8</sup>, R<sup>9</sup> and R<sup>10</sup> are each H and R<sup>11</sup> and R<sup>12</sup> are each OCH<sub>3</sub>.

Claim 19. (new) A pharmaceutical composition comprising as active ingredient a compound according to claim 1, optionally together with a pharmaceutically acceptable diluent or carrier.

Claim 20. (new) A pharmaceutical composition comprising as active ingredient a compound according to claim 6, optionally together with a pharmaceutically acceptable diluent or carrier.

Claim 21. (new) A method of treating a condition mediated by PDE5 in a subject in need of such treatment, which comprises administering to said subject an effective amount of a compound of formula I as defined in claim 1 in free form or in the form of a pharmaceutically acceptable salt.

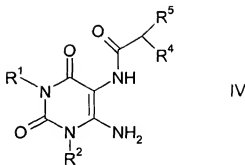
Claim 22. (new) A method of treating a condition mediated by PDE5 in a subject in need of such treatment, which comprises administering to said subject an effective amount of a compound of formula XXXVI as defined in claim 6 in free form or in the form of a pharmaceutically acceptable salt.

Claim 23. (new) A method of treating sexual dysfunction, particularly male erectile dysfunction, in a subject in need of such treatment, which comprises administering to said subject an effective amount of a compound of formula I as defined in claim 1 in free form or in the form of a pharmaceutically acceptable salt.

Claim 24. (new) A method of treating sexual dysfunction, particularly male erectile dysfunction, in a subject in need of such treatment, which comprises administering to said subject an effective amount of a compound of formula XXXVI as defined in claim 6 in free form or in the form of a pharmaceutically acceptable salt.

Claim 25. (new) A process for the preparation of a compound of formula I in free or salt form which comprises

- 1) (a) dehydrating a compound of formula



where R<sup>1</sup>, R<sup>2</sup>, R<sup>4</sup> and R<sup>5</sup> are as defined in claim 1; or

(b) for the preparation of a compound of formula I in free or salt form where R<sup>3</sup> is alkyl optionally substituted by hydroxy, alkoxy or alkylthio, reacting a compound of formula I in free or salt form with an appropriate alkylating agent; or

(c) for the preparation of a compound of formula I in free or salt form where R<sup>2</sup> is aralkyl substituted in the aryl ring by alkylsulfonylamino or dialkylaminosulfonylamino, reacting a compound of formula I in salt form where R<sup>2</sup> is aralkyl substituted by amino with, respectively, an alkylsulfonyl halide or dialkylaminosulfonyl halide; or

(d) for the preparation of a compound of formula I in free or salt form where R<sup>2</sup> is hydroxy-substituted alkyl, hydration of a compound of formula I where R<sup>2</sup> is alkenyl; or

(e) for the preparation of a compound of formula I in free or salt form where R<sup>2</sup> is alkyl substituted by alkylcarbonyloxy, appropriate esterification of a compound of formula I where R<sup>2</sup> is hydroxy-substituted alkyl; or

(f) for the preparation of a compound of formula I in free or salt form where R<sup>2</sup> is aralkyl substituted in the aryl ring by amino, hydrolysing a compound of formula I where R<sup>2</sup> is aralkyl substituted in the aryl ring by acylamino; or

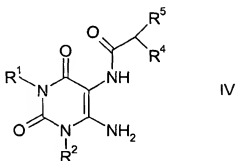
(g) for the preparation of a compound of formula I in free or salt form where R<sup>5</sup> is quinoliny or isoquinoliny substituted by hydroxy, dealkylation of a compound of formula I where R<sup>5</sup> is respectively quinoliny or isoquinoliny substituted by alkoxy; or

(h) for the preparation of a compound of formula I in free or salt form where R<sup>5</sup> is quinoliny or isoquinoliny substituted by halogen, halogenation of a compound of formula I where R<sup>5</sup> is respectively quinoliny or isoquinoliny having an unsubstituted ring carbon atom available for halogenation; or

(i) for the preparation of a compound of formula I in free or salt form where R<sup>2</sup> is a cyclopropyl group, optionally substituted by alkyl, subjecting a compound of formula I where R<sup>2</sup> is alkenyl to a Simmons Smith cyclopropanation reaction; and

2) recovering the resulting product of formula I in free or salt form.

Claim 26. (new) A compound of formula IV



where R<sup>1</sup>, R<sup>2</sup>, R<sup>4</sup> and R<sup>5</sup> are as defined in claim 1.

Claim 27. (new) A method of treating pulmonary hypertension in a subject in need of such treatment, which comprises administering to said subject an effective amount of a compound of formula I as defined in claim 13 in free form or in the form of a pharmaceutically acceptable salt.

Claim 28. (new) A method of treating pulmonary hypertension in a subject in need of such treatment, which comprises administering to said subject an effective amount of a compound of formula XXXXVI as defined in claim 18 in free form or in the form of a pharmaceutically acceptable salt.